

X.—*Reply to some Observations of Prof. WAGNER on the genus Mylodon.* By Prof. OWEN, F.R.S.

*To the Editors of the Annals of Natural History.*

GENTLEMEN,

IN the very excellent report on Mammalogy, in 1842, by Prof. A. Wagner, which forms part of the first valuable volume just published by the Ray Society, there occur two criticisms, to which satisfactory replies were given soon after they appeared, but which, being reproduced in an English translation, without comment, might mislead the zoological student on the points to which those criticisms refer.

The first (p. 60) relates to the genus *Mylodon*, and Prof. Wagner cites the late lamented and talented naturalist Dr. Harlan as having “proposed, in 1835, the name *Aulaxodon* or *Pleurodon* for *Mylodon* ;” adding, “the latter of these two is evidently better than *Mylodon*, which signifies nothing else than grinder.” I have shown in a letter, which the editors of the ‘American Journal of Science’ did me the honour to insert in the 44th vol. (January—March 1843) of their most useful periodical, that the fossil remains to which Dr. Harlan proposed to attach the names *Aulaxodon* or *Pleurodon* belong to an entirely distinct genus from the *Mylodon*, and that Dr. Harlan himself recognised the distinction, when remains of a true *Mylodon* were first presented to him, and accordingly proposed, in ignorance of my previous determination of the genus, to call the extinct animal to which those remains belonged ‘*Orycterotherium missouriense*.’

This species, also noticed as new in Prof. Wagner’s Report (p. 60), is synonymous with my *Mylodon Harlani*, first described in the ‘Fossil Mammalia of the Voyage of the Beagle,’ 4to, part 3, 1839, and afterwards with further details derived from examination of the very Missouri specimens on which Harlan had founded his genus ‘*Orycterotherium*’ in my memoir on the *Mylodon robustus* (4to, 1842).

With regard to Harlan’s *Aulaxodon* or *Pleurodon*, that genus is much more closely allied to *Megalonyx*, if it be really distinct from Cuvier’s genus.

And now a word for *Mylodon* as a name, admitting the genus to be a reality in nature. It is true that *μύλη*, *mola*, *ὄδοῦς*, *dens*, implies merely a beast having molar teeth only, and no canines or incisors; and that this character is equally applicable to other genera of Megatherioids. But the same objection might be urged against *Megalonyx* (*μέγας*, *magnus*, *ὄνυξ*, *unguis*), the species of which genus had not longer or larger claws than those of *Mylodon* or *Megatherium*. All the Megatherioids were remarkable for the enormous bulk and strength of their hind legs, and *Sce-*

*lidotherium* (σκελις, femur, θηρίον, bellua,) manifests but a slight exaggeration of this character in its fossil thigh-bones. Nor can any of the known Megatherioids be termed other than great beasts, although the *Megatherium* proper best merits that denomination. In selecting, therefore, the term *Mylodon* for an additional genus to this extinct race, I had in view a principle of the nomenclature of the Megatherioid genera by which all the characteristic peculiarities of the family are readily fixed in the memory.

The second remark on which I beg to advert bears upon an anatomical point, but one which I believe to be of high importance. Dr. Wagner (p. 38), referring to Prof. Mayer's valuable remarks on the Anatomy of the Marsupialia, specifies those of the brain, in which, in opposition to Owen, he recognises convolutions and a 'corpus callosum,' p. 38. I need only refer to my paper in the 'Philos. Transactions,' 1837, where the cerebral convolutions in the kangaroo and wombat are specially described, in order to demonstrate the want of a concomitant development of the 'corpus callosum' in those animals.

The great transverse band or commissure which unites the two hemispheres, spanning from one to the other *above the lateral ventricles*,—which is plainly visible, as such, in the lowest Rodent or other Placental Mammal, with the smoothest, and, to outward appearance, simplest brain,—this great commissure or corpus callosum, I again affirm, after reiterated dissections, to be absent in all the known genera of Marsupials. If the narrow transverse band, which unites together the hippocampi majores, at the front part of the fornix, be regarded, as I originally stated it might be, a rudiment of the 'corpus callosum,' the comparative anatomist is at liberty to apply that name to it. But, in point of fact, a great hiatus exists between the condition of the cerebral commissures in the Implacental and that condition which we find in the lowest of the Placental Mammalia. The transitional structures by which M. de Blainville traces a progressive deterioration of the commissural apparatus from Bats and Rodents to Marsupials I have not yet met with, and they seem to have equally escaped the observation of the able editors (Fréd. Cuvier and Laurillard) of the posthumous edition of Cuvier's 'Leçons d'Anat. Comparée,' 8vo, tom. iii. 1845, who have subjoined the following note to the text of the great master:—"Le corps calleux semblerait être en rapport de développement avec le corps strié, si l'on constatait dans d'autres animaux ce que montre déjà le cerveau du *dauphin*, qui a des hémisphères volumineux, un corps calleux proportionnellement petit et peu épais, et un corps strié très médiocre. Mais il y a, dans les Marsupiaux, une disposition remarquable de l'appareil de commissure formé par la voûte (fornix)

et le corps calleux (corpus callosum). Cet appareil y est réduit à ce point, que l'on a pu dire avec quelque vérité que le corps calleux n'existe pas." The editors then give a detailed account of a dissection of the brain of a kangaroo, confirmatory in all respects of my own, and they rightly remark: " Cette disparition presque totale du corps calleux ne se lie pas à un développement moindre du cerveau. Les hémisphères sont, avec la masse totale de l'encéphale, dans leurs rapports ordinaires, et rien au premier aspect ne ferait soupçonner la disposition de la voûte." They add, probably in reference to Prof. Mayer's statement: " L'observation de M. Owen sur cette disposition du cerveau des Marsupiaux a été repoussée à tort comme erronée. Il ne nie pas l'existence du corps calleux dans les Marsupiaux: il déclare formellement qu'on peut voir, si on le veut, dans ce qui reste de la commissure, le rudiment d'un corps calleux; mais il relève avec raison l'absence dans les Marsupiaux d'un corps calleux comparable à celui des autres Mammifères."—*Loc. cit.* pp. 101, 102.

The interest which you have always shown in the maintenance as well as the discovery of truths in natural history, has induced me to beg permission to trespass thus far on your valuable space.

I have the honour to be, Gentlemen,

Your obedient servant,

London, July 18th, 1845.

RICHARD OWEN.

XI.—*List of Birds found in the vicinity of Tunis and Biserta, from observations made during a month's visit from April 21st to May 21st 1845.* By H. M. DRUMMOND, 42nd R. H.

THE following list of a few of the birds frequenting the N. coast of Africa, as well as a former one of the birds of Crete (vide Ann. Nat. Hist. vol. xii. p. 423), I have been enabled to draw up through the kindness of Capt. Graves, H.M.S. Beacon, in inviting me to accompany him to the above-mentioned places, to whom also I am greatly indebted for the facilities he afforded me in accompanying the boats on an expedition up the lakes of Biserta. This list however is necessarily imperfect, owing to the shortness of my visit, as well as from the passage of the migratory birds being nearly terminated at the time of my arrival. The whole of these birds are found in the vicinity of the Biserta lakes, with the exception of the *Pterocles arenarius*, *P. setarius*, and *Otis houbara*.

The lakes of Biserta are about 40 miles to the westward of Tunis; it was said that they are much more extensive than is really the case, and also that a communication for shipping could easily be opened, rendering the lower lake one of the finest har-